AMENDMENTS TO THE CLAIMS

1-23. (cancelled)

24. (currently amended) A method ~~of~~for treatment ~~for~~of a cartilage or osteochondral defect ~~the promotion of cartilage and/or bone formation~~ comprising the step of administering an effective amount of Chemokine, CXC Motif, Ligand 6 (CXCL6) to an individual in need thereof, so as to obtain promotion of hyaline cartilage in said cartilage defects and optionally subchondral bone formation in said osteochondral defects.

25. (cancelled) ~~The method according to claim 24, which is a method for the prevention or treatment of a cartilage or osteochondral defect.~~

26. (currently amended) The method according to claim 24, which is a method for the ~~prevention or~~ treatment of a joint surface defect not related to inflammation.

27. (currently amended) The method according to claim 24, wherein said ~~the source of~~ CXCL6 is ~~a population of CXCL6-expressing cells~~ recombinant CXCL6.

28. (currently amended) The method according to claim 25, wherein said CXCL6 is administered in a concentration gradient to said osteochondral defect ~~in a gradient~~.

29. (previously presented) The method according to claim 24, further comprising the step of administering chondrogenic cells or precursor cells of said chondrogenic cells.

30. (withdrawn) A method of treatment for the promotion of cartilage and/or bone formation comprising the step of administering an effective amount of CXCL6-expressing cells to an individual in need thereof, wherein said cells comprise a foreign DNA encoding said CXCL6 under the control of a promoter.

31. (withdrawn) The method according to claim 30, which is a method for the prevention or treatment of a cartilage or osteochondral defect.

32. (withdrawn) The method according to claim 30, which is a method for the prevention or treatment of a joint surface defect not related to inflammation.

33. (withdrawn) The method according to claim 30, wherein said CXCL6-expressing cells are chondrogenic cells.

34. (withdrawn) The method according to claim 30, wherein said CXCL6-expressing cells are embedded in a matrix.

35. (withdrawn) A method for determining chondrocyte phenotypic stability of a cell population, said method comprising the steps of a) providing a chondrocyte cell population and b) determining the expression of CXCL6 by said cell population, wherein expression of CXCL6 is indicative of said chondrocyte phenotypic stability.

36. (withdrawn) A method of inducing or restoring chondrocyte phenotypic stability in a progenitor cell population in vitro, said method comprising the step of administering CXCL6 to said progenitor cell population.

37. (withdrawn) A method of inducing or restoring differentiation of a precursor cell population into chondrocytes, said method comprising the step of administering CXCL6 to said precursor cell population.

38. (withdrawn) A method for producing a medicament for the promotion of formation of cartilage or bone in vivo, which method comprises

a) obtaining cells from a cartilage biopsy;

b) selecting cells therefrom based on CXCL6 expression; and

c) formulating said CXCL-6 expressing cells in a medicament.

39. (new) The method according to claim 24, wherein said osteochondral defect is a joint surface defect.